# CLEAN WATER STATE REVOLVING FUND PROGRAMS

2008 ANNUAL REPORT

*Cleaning Our Waters,*
*Renewing Our Communities,*
*Creating Jobs*

EPA

## CWSRF PROGRAM HIGHLIGHTS:

- $68.8 billion in cumulative assistance provided [1]
- 69% of assistance funds projects that protect human health [2]
- 115 million people affected living in 2,262 communities [2]
- 600,000 construction jobs and 116,000 additional jobs created between 1987 and 2005 [3]
- Average savings of 20% of total project costs for 20-year loan [1]
- Fund utilization rate of 98% [1]
- 2.41 times cumulative return on federal investment [1]

[1] National Information Management System

[2] CWSRF Benefits Reporting System

[3] Council of Infrastructure Financing Authorities (CIFA). *The Clean Water State Revolving Fund (CWSRF): State Report 2005.*

# TABLE OF CONTENTS

## CLEAN WATER STATE REVOLVING FUND PROGRAMS

# *Cleaning our Waters, Renewing our Communities, Creating Jobs*

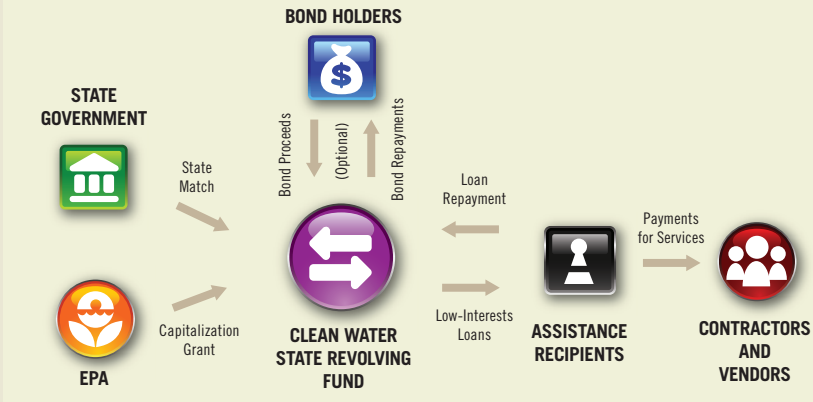
**The Clean Water State Revolving Fund** (CWSRF) provides attractive low-cost funding for projects that improve water quality, renew infrastructure, and support local economies. Initiated by Congress in 1987 and implemented by EPA and states, the CWSRF reflects a national commitment to the protection and restoration of rivers, lakes, and estuaries that are essential to communities and wildlife. Through 2008, the CWSRF has provided $69 billion in cumulative assistance for wastewater infrastructure, nonpoint source, and estuary projects. It has also brought significant cost savings to assistance recipients. By using the CWSRF in 2008, borrowers saved 20 percent over the life of a typical 20-year loan when compared to conventional financing.

It takes billions of dollars each year to protect and improve the quality of water in our rivers, lakes, and streams. The CWSRF is widely recognized as a critical source of funding that enables communities to renew aging municipal infrastructure and restore at-risk aquatic ecosystems. Performance tracking reports show that more than one-hundred million people have benefited from CWSRF funded projects. CWSRF assistance also supports local economies through job creation during project construction and by helping to ensure that water resources are available for use by businesses.

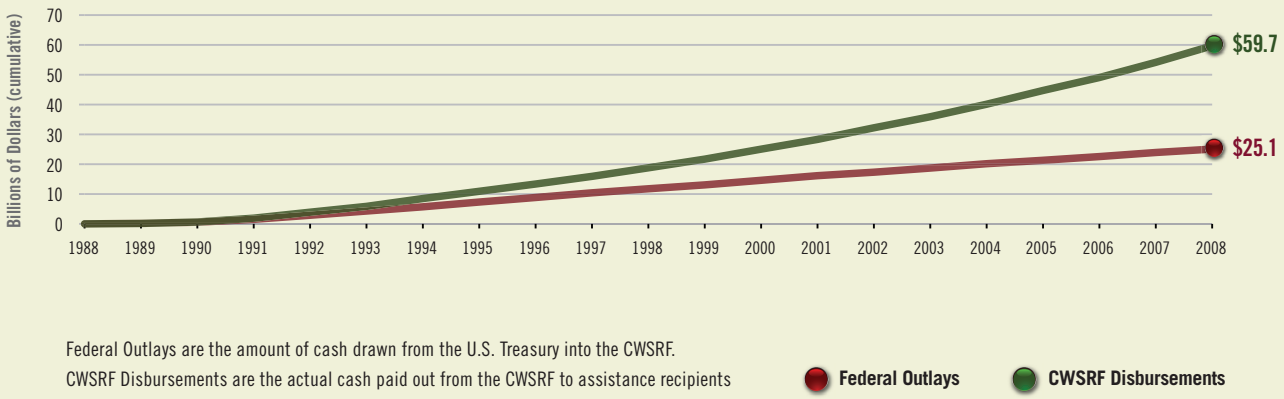
The CWSRF is comprised of 51 independent revolving loan funds in all 50 states and Puerto Rico. These programs are unique because they represent a collaborative partnership at the federal and state level. To date, the federal government has contributed more than $26 billion and states have added another $5.6 billion in required matching funds. Although there is EPA oversight, the states have the lead role in structuring and managing the programs. States have used this flexibility to create unparalleled environmental and economic benefits.

By providing assistance to a wide variety of eligible water quality projects in the form of low interest loans, CWSRF programs function as environmental infrastructure banks. As principal and interest repayments are recycled back into individual programs, they become available to fund additional projects. This revolving structure means that the programs not only replenish themselves over time, but grow in financial capacity as loan repayments are made. States can also choose to issue bonds backed by CWSRF assets to provide additional assistance. To date, 27 states have done so, raising an additional $22.4 billion to help meet the environmental needs of communities. Figure 1 illustrates how the programs operate.

**FIGURE 1 | How the CWSRF Program Works**



## FIGURE 2 | CWSRFs Return 2.41 Times the Federal Investment as of 2008




Federal Outlays are the amount of cash drawn from the U.S. Treasury into the CWSRF.
CWSRF Disbursements are the actual cash paid out from the CWSRF to assistance recipients

Federal Outlays  CWSRF Disbursements

Responsible fiscal management and the programs' ability to revolve over time have resulted in a remarkable return on federal investment. As of 2008, for every federal dollar contributed, $2.41 has been provided in assistance (see Figure 2). This return is expected to increase as loan repayments are used to fund new projects, and states maintain strong, directed program management. Increased funding capacity is important because of rising needs, due both to construction cost inflation and the number of existing plants that are reaching the end of their useful life. The continued growth of the programs ensures that funding will be available for projects that improve and maintain water quality well into the future.

There are many factors that make the CWSRF programs stable funding sources for environmental protection. Wastewater infrastructure is one of the safest investments due to the financial strength of local communities and the dependability of water and sewer revenues. Fitch Ratings estimates show that during the time period between 1979 and 1999, which included several recessions, the default rate on municipal water and sewer bonds was only 0.04 percent[1].

Adding to this is a proven track record of federal and state financial oversight. For example, states conduct reviews of assistance recipients during the application process to evaluate their financial condition and to ascertain whether they have established a dedicated revenue source for loan repayment. This means that future lending capacity is extremely secure, and CWSRF funding will be available even when access to other financing sources may be limited. This also permits states that choose to raise additional funds by issuing bonds to retain high credit ratings, allowing them to receive the most favorable interest rates offered in the credit markets.

The revolving nature of the CWSRF programs means that when a community repays a loan it has received, it is supplying funding that will be used to help another community clean its waters and revitalize its infrastructure. Each project ultimately helps improve water quality across the state and country. By choosing CWSRF funding, communities are improving their own water quality while simultaneously sharing in a commitment to renew neighboring communities and protect shared water resources.

[1] Fitch Ratings. *Financial Guaranties Special Report: Bond Insurers Transcend Municipal Market.* 1999.

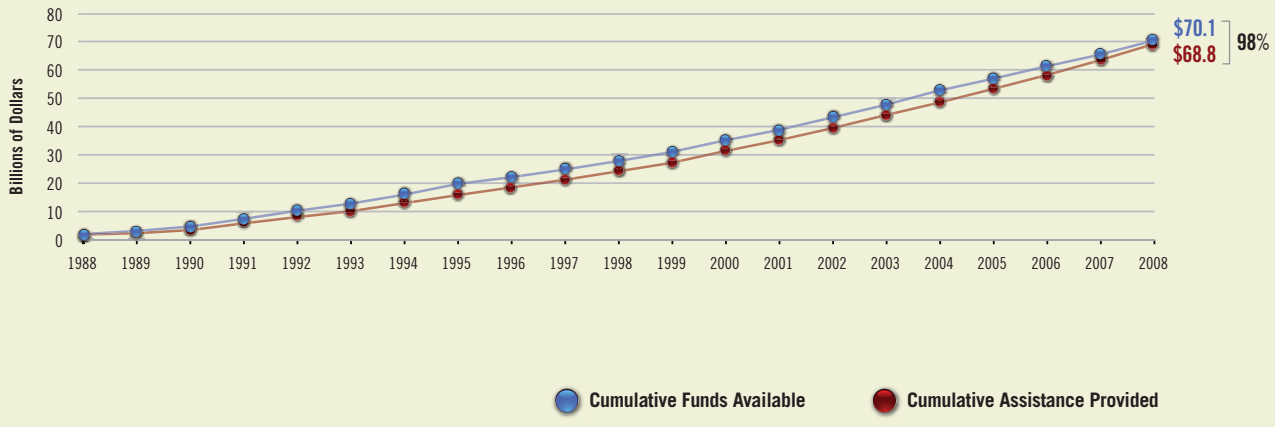
Flexibility is a hallmark of the CWSRF programs. The Clean Water Act gives states a broad array of financing options beyond traditional and very popular low-interest CWSRF loans. CWSRF programs may also offer local debt guarantees or insurance for local debt and even provide guarantees for local borrowing that is used to create "sub-state" revolving funds. States can use a combination of these assistance options to maximize the impact of available funds.

The CWSRF programs can also fund a wide range of project types, including those that contain sustainable, low-impact, and climate change mitigation design components. EPA encourages innovation across CWSRF programs. The annual Performance and Innovation in the SRF Creating Environmental Success (PISCES) Awards recognize projects and programs that creatively and effectively use CWSRF funding to meet the environmental needs of communities.

This latitude allows states to direct CWSRF funding to the most deserving projects, which are evaluated according to state-defined priority ranking systems that may be altered to reflect new priorities and new project types. Many states have modified their priority setting process over time and now have integrated priority systems that include evaluation criteria to assess all types of projects. New priorities such as green infrastructure, energy conservation, and climate change impact can be incorporated into state CWSRF priority systems as states respond to new funding opportunities.

As Figure 3 demonstrates, states have proven to be extremely successful at structuring their programs so funds are directed towards pressing environmental problems. Through 2008, the CWSRF programs have committed over 98 percent of the $70 billion in cumulative funds available. This exceptional rate of fund utilization demonstrates continued strong demand for CWSRF financing, and is a direct result of the large number of important needs, the attractiveness of below market interest rates, the flexibility of financing options, and sound state program management.

**FIGURE 3 | 98% of CWSRF Funds Committed to Projects as of 2008**



In addition to their significant environmental contributions, the CWSRF programs play an important role in improving local economies. Numerous jobs across multiple sectors are created through the construction and renovation of wastewater infrastructure. Many are directly related to the projects being funded, covering planning, design, and construction. Others are indirect, resulting from spending associated with project implementation, such as the production of raw materials like steel and concrete.

Several private and public studies conducted over the past several years estimate that 20,000 – 60,000 jobs are created for every $1 billion in federal investment in wastewater infrastructure.[2] This number is likely low for the CWSRF programs, because unlike standard grant-based federal infrastructure investment programs, CWSRF dollars are spent repeatedly as loan repayments are recycled back through the program. The Council of Infrastructure Financing Authorities estimated in 2005 that 600,000 construction jobs and 116,000 additional jobs resulted from CWSRF funding over the programs' first seventeen years.[3]

Once projects are completed, economic benefits continue, as water is an important resource and commodity for businesses across the country. In 2000, the agriculture industry used more than fifty trillion gallons of water for irrigation of fields and another two trillion gallons to support livestock and aquaculture.[4] Another seven trillion gallons of fresh water were used for industrial purposes such as fabricating a product or cooling during manufacturing. Water is also essential for industries including the $50 billion/year water-based recreation industry and the $300 billion/year coastal tourism industry.[5] CWSRF funded projects greatly aid these substantial components of the national economy by protecting and restoring the water that they need to operate.

The economic impact of CWSRF funding is enhanced through partnerships between assistance recipients and local businesses. Some communities work with sources of industrial waste, such as local manufacturing, to figure out ways to most effectively deal with waste streams. For example, Le Center, Minnesota made a landmark deal with a local manufacturing company, which agreed to install an oil/water separator and monitoring station if the city would expand its treatment facility to accept the resulting wastewater. Le Center received a CWSRF loan for this expansion. Other communities find that local businesses can make use of effluent instead of drawing from stressed public water supplies. Eastern Idaho Regional Wastewater Authority received a CWSRF loan to build a new treatment facility and the effluent from the plant will be supplied to a manufacturing company for reuse. This will protect the local aquifer while simultaneously supporting local business.

[2] Council of Infrastructure Financing Authorities (CIFA). *The Clean Water State Revolving Fund (CWSRF): State Report 2005*. 2005; Federal Highway Administration. *Highway Infrastructure Investment and Job Generation*. 1996; National Utility Contractors Association. *A Report on Clean Water Investment and Job Creation*. 1992; Natural Resources Defense Council. *All Dried Up: How Clean Water is Threatened by Budget Cuts*. September 2004; RTI International/Global Insight, Inc. *Estimating Employment Impacts of Water Infrastructure Funding, A Report to Congress*. September 2004.

[3] Council of Infrastructure Financing Authorities (CIFA). *The Clean Water State Revolving Fund (CWSRF): State Report 2005*.

[4] United States Geological Survey. *Estimated Use of Water in the United States in 2000*.

[5] Water Infrastructure Network. *Water Infrastructure Now: Recommendations for Clean and Safe Water in the 21st Century*. February 2001.

# Strategic Management

## *A Continued Commitment to Meeting Needs*

**Since being established, the CWSRF programs have been very successful in reaching and serving communities across the country. More than 22,000 loans have been made, with 66% going to communities with a population of fewer than 10,000 people. Recognizing the importance of addressing newly identified or unmet needs, states have directed CWSRF funding towards a variety of traditional and innovative water quality projects. States are also engaging in better planning that considers new eligibilities, financial assistance terms, and repayment sources.**

EPA is actively exploring and promoting strategic management to assist CWSRF programs as they continue to clean our water and renew our communities. During the past year, EPA has encouraged states to take a fresh look at program eligibilities and consider what new funding solutions might be implemented to respond to new and continuing water quality issues. Concurrent with state efforts, EPA has undertaken a comprehensive re-examination of financing options and project eligibilities allowed by the Clean Water Act with the draft white paper "The Clean Water State Revolving Fund Program: Tapping its Untapped Potential." Together, these strategic management efforts enhance the ability of the CWSRF to meet current and future needs.

## STRATEGIC PLANNING

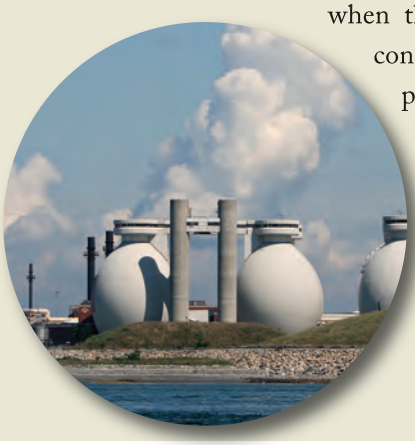
Many CWSRF programs periodically evaluate their structure to ensure funds are being used efficiently over time. States across the country, including California, Texas, Missouri, New Mexico, Arizona, and Hawaii, have undertaken strategic management and planning assessments with EPA support. These and other states, such as Ohio, are examining their program mission and objectives, reaching out to communities with the greatest financial needs, and streamlining processes to reduce the time and effort it takes to fund a project through the CWSRF.

An important aspect of strategic planning is the periodic assessment of the project priority setting system to ensure that it adapts to changing state water quality priorities. States have the flexibility to structure priority setting criteria so that they address state-specified water quality goals. A well conceived priority system is an important step in ensuring that program funding reaches both regionally important projects and small, disadvantaged communities. States may also consider how best to partner CWSRF assistance with other federal or state funding

programs to create the most attractive funding solution for loan applicants.

Another important step in CWSRF strategic planning and management is streamlining the loan process to make it as efficient as possible. Many small and disadvantaged communities find financial and environmental requirements complicated, so working to reduce the number of steps in the application process is a key to reaching these types of borrowers. For example, some states have worked with other public lenders to create a common application, making it easier for communities to find the funding source that is right for them. Others have assigned state staff to assist borrowers as they move through the loan process. Making the programs easier for communities to navigate helps ensure that those with the greatest need are able to apply for and receive assistance.

CWSRF programs are also interested in getting communities to start planning well in advance of construction, in order to facilitate a continuous pipeline of new projects ready to receive funding. Many states provide planning and design loans to help with pre-construction costs. Communities are then encouraged to apply for CWSRF financing when they are ready to begin construction. A project pipeline helps to ensure that states have high priority projects ready to go each year that will take full advantage of program assistance.



## EPA SUPPORT OF STATE EFFORTS TO REEXAMINE EXISTING ELIGIBILITIES

By identifying water quality needs and priorities, states can pursue projects that will best address water quality concerns. To support these efforts, the draft white paper lists many types of water quality and infrastructure projects eligible for CWSRF assistance. The white paper includes several new project types which have yet to be funded (see box below). It also explores the forms of financial assistance that may be offered by CWSRF programs in addition to traditional loans, including guarantees, insurance, and the purchase of local bonds.

To incorporate comments from stakeholders, a second draft of the white paper is being developed. The new draft will include additional financial innovations that can augment the amount of CWSRF funding available to protect and restore our wa-

**Project types identified in the white paper that are yet to be funded by a CWSRF include:**

- Energy audit of public wastewater treatment facility or system.
- Generation of pollution control credits.
- Control of source of atmospheric deposition that adversely affects water quality.
- Estuary projects outside of current National Estuary Program (NEP) study areas but within estuarial watershed (requires expansion of NEP study areas).

ters. Information on eligibilities is being restructured so that states can easily evaluate whether a proposed project can receive CWSRF financing. Finally, the new version of the white paper will have a greater emphasis on strategic management, demonstrating that the environmental impact of the programs can be maximized when various project eligibilities are coordinated with the possible financial innovations.

EPA is seeking feedback from a variety of sources to ensure that the draft white paper is a truly useful document. The paper will continue to be discussed at EPA sponsored regional training workshops, biannual EPA/State Workgroup meetings, and regional roundtables. Many of the programs' best ideas and innovations have been developed at the state and regional level and EPA is committed to including them in the new draft of the white paper.

## FOCUS ON ALTERNATIVE PROJECTS

Many of the alternative project types identified in the draft white paper have already been funded by states. Several programs are focusing on sustainable infrastructure and projects that use low impact development practices because these types of projects can provide effective solutions that responsibly address long-term environmental needs. Other states are funding projects which contribute to national efforts to promote climate change mitigation and adaptation. Effective management of water resources will require the CWSRF programs to seriously consider these innovative areas while maintaining their commitment to traditional pipe and plant projects. Several examples include:

- ***Sustainable infrastructure projects.*** Sustainable infrastructure projects include green infrastructure, water reclamation, and water reuse projects and have been funded by states throughout the country. Orange

County, California and Madison, Wisconsin have funded projects specifically designed to recharge the water supply in depleted aquifers and watersheds. Other assistance recipients, such as Grand Lake, Oklahoma, plan to use effluent from new wastewater treatment facilities for other purposes, including the irrigation of local recreational areas.

- ***Low-impact projects.*** A number of states have focused on ways to lessen the impact of wastewater treatment facilities on the environment as well as the surrounding community. For example, an Arizona community used CWSRF funds to convert underused oxidation ditches into highly efficient sludge processors, and a community in Maine constructed a new treatment facility on the site of old, derelict buildings that had become community eyesores. Seattle, Washington received a CWSRF loan to implement low-impact urban stormwater management projects, including rain gardens and porous pavement, in order to protect water quality in an urban creek with an endangered salmon population.

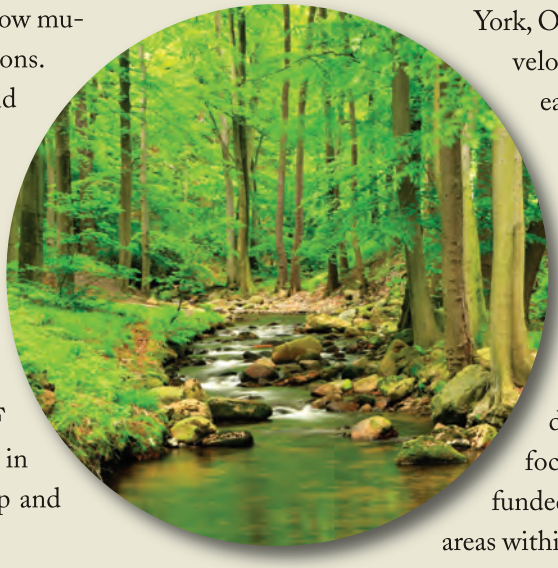
- ***Climate change projects.*** Projects that aim to lessen the impact of climate change often have additional benefits, such as long-term cost savings when compared to traditional alternatives. A township in Michigan re-

ceived a CWSRF loan to add methane capture energy production to its solid waste treatment facility, which will save the municipality approximately $30,000 a year in energy costs. In Arkansas, a community funded a project to restructure its collection system, replacing several pump stations with gravity lines, reducing its carbon emissions and saving the community significant energy and maintenance costs.

## TARGETED OUTREACH

CWSRF programs are only as effective as the projects they fund, so outreach to prospective borrowers has become an increasingly important part of strategic management efforts. Several states, including Iowa and Missouri, are reexamining their outreach strategies to ensure that projects they target help achieve state water quality goals. Outreach efforts often go hand in hand with strategic planning.

States first contact current and potential borrowers, collecting information on how those communities perceive the CWSRF as well as how municipalities make financial decisions. Gathered through interviews and focus groups, this information helps programs identify places where improvements can be made. States then work with experienced communication professionals to determine ways to improve the impressions communities have of the CWSRF programs. EPA then assists states in using this information to develop and execute marketing plans.



Iowa exemplifies these efforts as it begins implementing its 2008 outreach plan. Activities highlighted include the creation of a set of ads for magazines that target government employees, the production of a new brochure that will be distributed at industry events, and the development of a new website that will make it easier for communities to learn about the CWSRF. EPA will be working with Iowa to monitor the success of these new outreach tools.

## USING CWSRF ENVIRONMENTAL RESULTS DATA

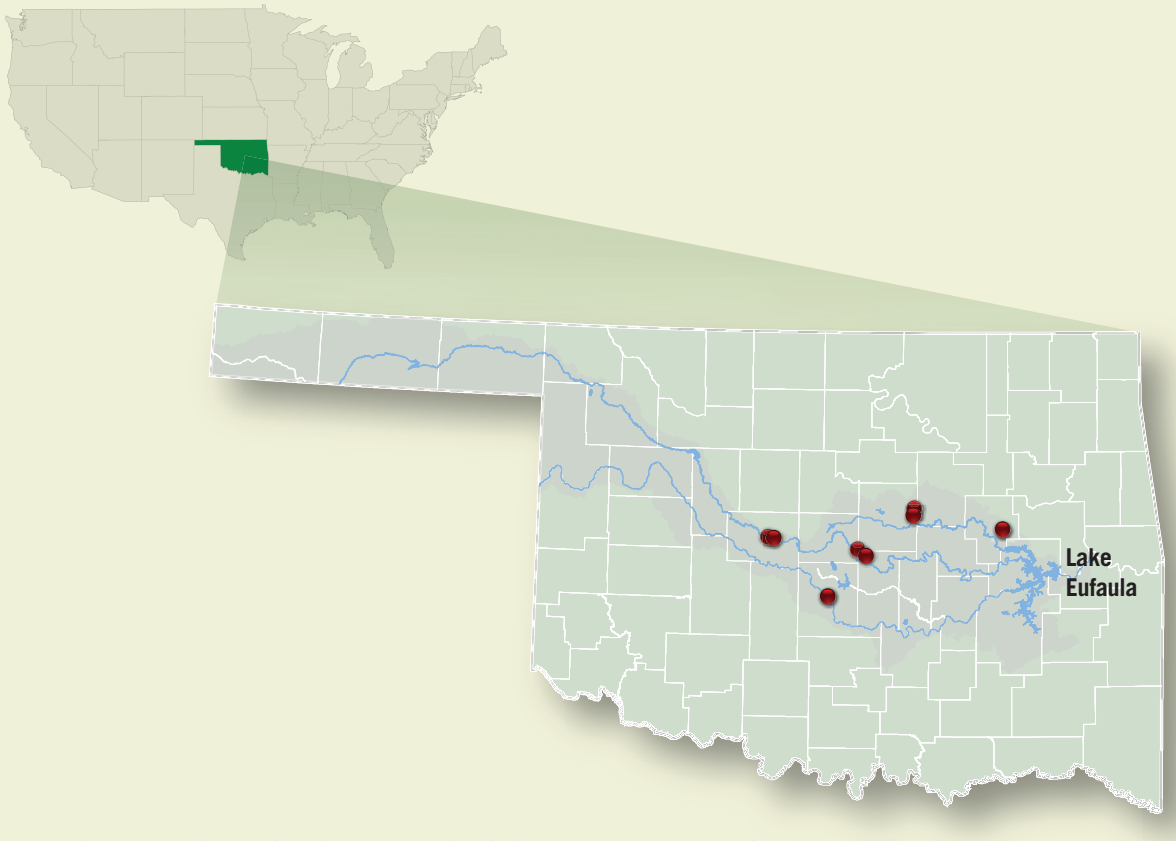
EPA is supporting states as they develop tools to assist in planning and outreach efforts, often taking advantage of data that states input into the CWSRF Benefits Reporting (CBR) system. Some states use this data to enhance outreach, while others use it to evaluate their success in addressing state water quality priorities. One example of using CBR data for management and outreach purposes is to use CBR data entries when developing maps that include CWSRF funded project information.

Several states including Iowa, Maryland, New York, Ohio, and Oklahoma have begun to develop state mapping capabilities. While each state's mapping system is different, they all display the locations of projects funded by the CWSRF together with other environmental and economic information for the state. Oklahoma's maps show the location of projects within specific watersheds, counties, and congressional districts (see Figure 4). Iowa's system focuses on comparing the location of funded nonpoint source projects to priority areas within the state, for example showing agricultural best management practice projects on the same map as the location of open feedlots. Maps are an accessible way for CWSRF managers to demonstrate the cumu-

lative, long-term positive effects that years of CWSRF funding have had on local water bodies.

Efforts have also been undertaken to combine the information collected by the CBR system with other national water quality data. The CBR data has been added to the Office of Water's Watershed Assessment, Tracking & Environmental ResultS (WATERS), which is a publicly available EPA platform for storing and viewing national information on nutrient criteria, water quality standards, and impaired waters. Through the Expert Query tool, the WATERS platform allows users to search for and sort through projects based on loan and project details. WATERS also includes a mapping application, EnviroMapper, which can display CWSRF project locations on maps together with information from other EPA datasets, such as 303(d) listed impaired water bodies. WATERS can be accessed online at **http://www.epa.gov/waters**.

**FIGURE 4 | Oklahoma CBR Mapping**




**Map showing CWSRF project locations, rivers, and counties within the Lake Eufaula watershed in Oklahoma.**

# 2008 CWSRF PISCES AWARDS

## PERFORMANCE AND INNOVATION IN THE SRF

*The CWSRF programs are dedicated to funding projects that protect and improve the environment without burdening the financial capacity of local communities. The 2008 PISCES Awards (Performance and Innovation in the SRF Creating Environmental Success) recognize assistance recipients across the county that have showed exemplary leadership and innovation in project planning, design, and implementation to further EPA water quality protection goals.*

In 2008, states identified 34 outstanding assistance recipients to receive PISCES Awards. Each state had the opportunity to nominate one or more projects that demonstrated high-quality performance, financial integrity, and Clean Water Act compliance. Nominees also had to demonstrate performance in at least one of seven key areas:

**Better management practices**

**Full-cost pricing**

**Efficient water use**

**Watershed-based planning**

**Innovation in financing**

**Innovation in project implementation**

**Creative use of partnerships**

One recipient from each state was selected to receive the Award. Winners were announced at the national meeting of the Council of Infrastructure Financing Authorities (CIFA) in Providence, RI in October 2008.

The recipients of the Fourth Annual PISCES Awards are examples of the types of projects that best represent the CWSRF's commitment to innovative and sustainable water quality financing.

In effectively meeting local and state water quality goals, they demonstrate that creative planning and design can balance environmental needs with fiscal responsibility.

# 2008 PISCES AWARD WINNERS

## REGION 8

**Sioux Falls, South Dakota:** Funded a cost share contribution to the Central Big Sioux River Watershed Restoration project in addition to the construction of a new sanitary sewer.

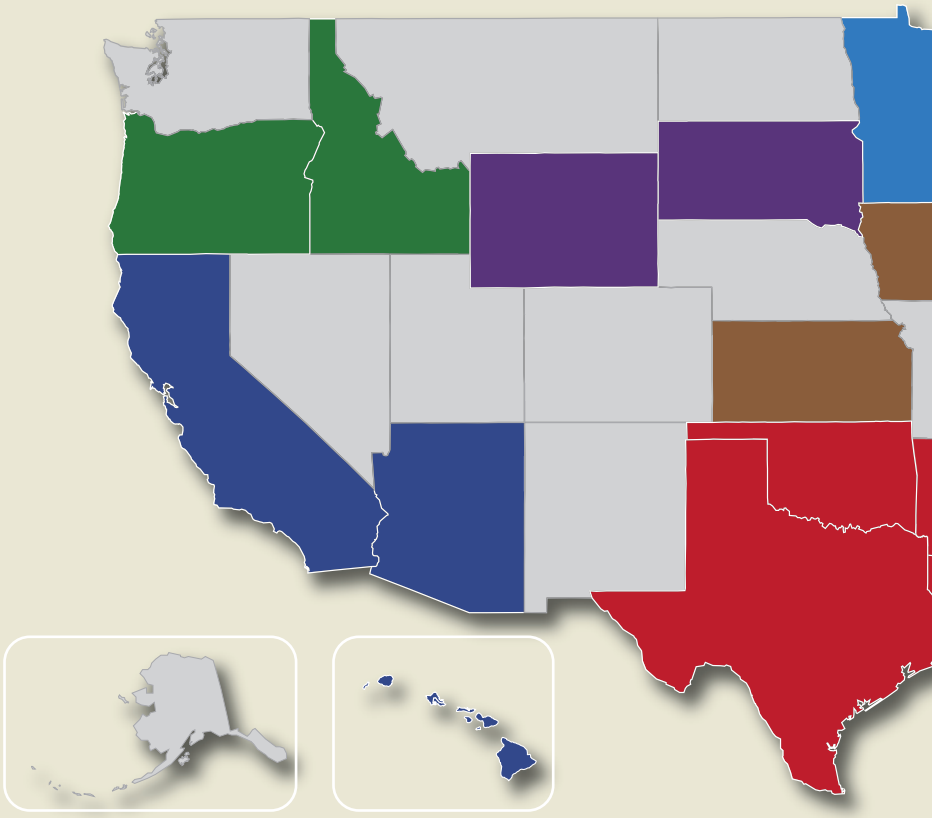
**Alpine, Wyoming:** Replaced an existing wastewater treatment facility with a new, larger facility and a new sewage collection system.

## REGION 5

**Fox Metro Water Reclamation District, Illinois:** Installed energy saving systems, including a heat exchange system and a sludge drier, to improve treatment plan efficiency.

**Peru, Indiana:** Doubled treatment plant capacity by converting the existing anaerobic digestion process to aerobic/anaerobic sequencing digestion.

**Delhi Charter Township, Michigan:** Rehabilitated a wastewater treatment plant



## REGION 10

**Eastern Idaho Regional Wastewater Authority, Idaho:** Connected four cities to a new wastewater treatment facility which will produce effluent to be supplied to local industry for reuse.

**Community of Rieth, Umatilla County, Oregon:** Constructed a new collection system, pump, and sewer line to connect wastewater to a neighboring sewer system.

## REGION 9

**Prescott Valley, Arizona:** Converted underused oxidation ditches to activated sludge processors, replacing existing, lesser quality filters.

**Orange County, California:** Implemented a groundwater replenishment system designed to return highly treated wastewater to the County's groundwater supply through a series of recharge basins.

**Hawaii, Hawaii:** Replaced existing cesspools at publicly owned facilities with onsite wastewater systems.

## REGION 7

**Charles City, Iowa:** Expanded and upgraded the existing water pollution control plan to address capacity needs.

**Hutchinson, Kansas:** Constructed a facility to pump water from a contaminated local aquifer and treat it before returning it to the aquifer.

## REGION 6

**Beebe, Arkansas:** Replaced several pump stations in its wastewater system with energy and maintenance saving gravity lines.

**Lafourche Sewer District No. 1, Louisiana:** Upgraded the local wastewater system to meet advanced treatment criteria.

**Grand Lake Public Works Authority,**

so that the biosolids it produces can be used for methane capture energy production.

**Le Center, Minnesota:** Partnered with local industry to ensure that increasing levels of waste will be effectively processed.

**Madison Metropolitan Sewerage District, Wisconsin:** Constructed an effluent force main to return treated wastewater to the Sugar River basin to augment stream flows.

## REGION 1

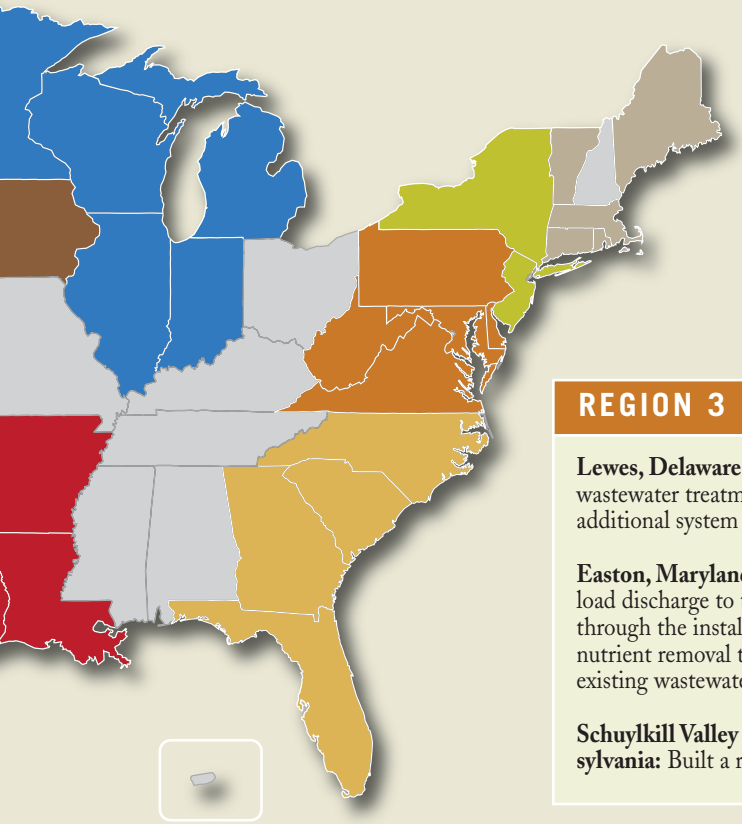
**Point O'Woods Association, Connecticut:** Replaced onsite septic systems and a seasonal water system with sanitary sewer and year-round water distribution systems.

**Bucksport, Maine:** Constructed a new combined sewer overflow treatment facility utilizing low-energy swirl concentrator technology.

**Cohasset, Massachusetts:** Implemented a low impact stormwater runoff management system, including forty rain gardens, to protect drinking water supply.

**Middletown, Rhode Island:** Purchased forty-five acres of agricultural land in order to prevent it from being developed, thereby protecting the local drinking water reservoir.

**Colchester, Vermont:** Capitalized a local homeowner septic system revolving fund.



## REGION 2

**Rahway Valley Sewerage Authority, New Jersey:** Upgraded the city's wastewater treatment facility, including the installation of a new UV disinfection system.

**Rockland County Sewer District No. 1, New York:** Replaced septic systems with a new collection system and advanced treatment plant designed to protect the local aquifer.

## REGION 3

**Lewes, Delaware:** Expanded the city's wastewater treatment plant to meet additional system capacity needs.

**Easton, Maryland:** Capped nutrient load discharge to the Chesapeake Bay through the installation of enhanced nutrient removal technologies in the existing wastewater system.

**Schuylkill Valley Sewer Authority, Pennsylvania:** Built a regional wastewater treatment facility to replace direct discharge of residential sewage and stormwater runoff.

**Abingdon, Virginia:** Upgraded a reclamation facility to include capacity to treat septic tank wastewater, grease, and other special wastes.

**Morgantown, West Virginia:** Reconstructed an existing wetland to improve stormwater detention and implemented natural stream restoration to stabilize stream banks.

**Oklahoma:** Protected Grand Lake by replacing a large number of residential septic systems with a new secondary treatment facility.

**Eagle Pass, Texas:** Expanded regional wastewater treatment capacity to treat waste from previously un-served areas of Maverick County.

## REGION 4

**Marathon, Florida:** Implemented a comprehensive approach to wastewater management, including the construction of an innovative vacuum wastewater collection system.

**Gainesville, Georgia:** Expanded reclamation facilities to include energy efficient membrane filtration as part of a watershed-wide water quality plan.

**Brunswick County, North Carolina:** Constructed a regional tertiary wastewater reclamation system capable of producing reuse-quality effluent.

**Lexington County, South Carolina:** Replaced septic tanks with a sewer connection to an existing treatment system.

# STATE AGENCIES THAT MANAGE CWSRF PROGRAMS

### EPA Region 1 – Boston, Massachusetts
Connecticut Department of Environmental Protection
Connecticut Office of the Treasurer
Maine Municipal Bond Bank
Maine Department of Environmental Protection
Massachusetts Water Pollution Abatement Trust
Massachusetts Department of Environmental Protection
New Hampshire Department of Environmental Services
Rhode Island Clean Water Finance Agency
Rhode Island Department of Environmental Management
Vermont Department of Environmental Conservation
Vermont Municipal Bond Bank

### EPA Region 2 – New York, New York
New Jersey Department of Environmental Protection
New Jersey Environmental Infrastructure Trust
New York State Environmental Facilities Corporation
New York Department of Environmental Conservation
Puerto Rico Environmental Quality Board
Puerto Rico Infrastructure Financing Authority

### EPA Region 3 – Philadelphia, Pennsylvania
Delaware Department of Natural Resources and Environmental Control
Maryland Department of the Environment
Pennsylvania Infrastructure Investment Authority
Pennsylvania Department of Environmental Protection
Virginia Department of Environmental Quality
Virginia Resources Authority
West Virginia Department of Environmental Protection
West Virginia Water Development Authority

### EPA Region 4 – Atlanta, Georgia
Alabama Department of Environmental Management
Florida Department of Environmental Protection
Georgia Environmental Facilities Authority
Kentucky Infrastructure Authority
Kentucky Division of Water
Mississippi Department of Environmental Quality
North Carolina Department of Environment and Natural Resources
South Carolina Department of Health and Environmental Control
South Carolina Budget and Control Board
Tennessee Department of Environment and Conservation
Tennessee Comptroller of the Treasury

### EPA Region 5 – Chicago, Illinois
Illinois Environmental Protection Agency
Indiana Department of Environmental Management
Indiana State Budget Agency
Indiana Finance Authority
Michigan Department of Environmental Quality
Michigan Municipal Bond Authority
Minnesota Public Facilities Authority
Minnesota Pollution Control Agency
Minnesota Department of Agriculture
Ohio Environmental Protection Agency
Ohio Water Development Authority
Wisconsin Department of Natural Resources
Wisconsin Department of Administration

### EPA Region 6 – Dallas, Texas
Arkansas Soil and Water Conservation Commission
Arkansas Development Finance Authority
Louisiana Department of Environmental Quality
New Mexico Environment Department
Oklahoma Water Resources Board
Texas Water Development Board

### EPA Region 7 – Kansas City, Missouri
Iowa Department of Natural Resources
Iowa Finance Authority
Kansas Department of Health and Environment
Kansas Department of Administration
Kansas Rural Water Finance Authority
Kansas Development Finance Authority
Missouri Department of Natural Resources
Missouri Environmental Improvement and Energy Resources Authority
Nebraska Department of Environmental Quality
Nebraska Investment Finance Authority

### EPA Region 8 – Denver, Colorado
Colorado Water Resources and Power Development Authority
Colorado Department of Public Health and Environment
Colorado Department of Local Affairs
Montana Department of Environmental Quality
Montana Department of Natural Resources and Conservation
North Dakota Department of Health
North Dakota Public Finance Authority
South Dakota Department of Environment and Natural Resources
Utah Department of Environmental Quality
Wyoming Department of Environmental Quality
Wyoming Office of State Lands and Investments

### EPA Region 9 – San Francisco, California
Arizona Water Infrastructure Finance Authority
California State Water Resources Control Board
Hawaii Department of Health
Nevada Department of Conservation and Natural Resources

### EPA Region 10 – Seattle, Washington
Alaska Department of Environmental Conservation
Idaho Department of Environmental Quality
Oregon Department of Environmental Quality
Washington Department of Ecology

# New CWSRF Initiatives for 2009

**EPA will pursue many activities during 2009 that focus on professional development, promoting effective management and oversight, and expanding marketing and outreach. Designed to provide CWSRF staff with the resources they need to maximize program performance and to document and share best management practices, these initiatives show EPA's commitment to the continued improvement of the CWSRF programs.**

## PROFESSIONAL DEVELOPMENT

EPA is committed to providing CWSRF staff with the resources necessary for effective program management. In addition to holding training workshops in five regions, EPA will implement several new training tools in 2009:

### New Employee Training Workshop

EPA is conducting a three-day training workshop for new federal employees, covering basic oversight of the CWSRF programs. Participants will be shown how to review core CWSRF documents, including intended use plans and annual reports. The proper procedure for conducting annual onsite reviews will also be covered. The training workshop will be held in Chicago, Illinois from May 5 - 7, 2009.

### CWSRF Training Videos

EPA is developing a series of videos presenting basic programmatic information as well as more advanced topics. Basic CWSRF program overview and CWSRF Benefits Reporting System training videos were released in 2008. Additional videos planned for 2009 will cover program structures, requirements, and documentation, as well as strategic marketing.

### CWSRF Financial Accreditation Program: Module II

The CWSRF Financial Accreditation Program is designed to ensure that personnel are familiar with financial and statutory topics essential to the proper oversight and management of the CWSRF programs. Through a series of open book exams, the Accreditation Program allows staff to enhance their skills as they relate to the financial requirements of the programs and practices commonly found in the municipal finance industry. Module I was released in late 2007 and the intermediate level Module II is currently being developed. Module II will include more advanced questions on cash draw rules and reporting and auditing requirements, as well as subjects such as

municipal bond issuance and financial management and planning. Module I and updates on the status of Module II of the Accreditation Program can be found on the CWSRF discussion forum at **http://cwsrf.invisionzone.com**.

## EFFECTIVE MANAGEMENT AND OVERSIGHT

It is important to not only highlight examples of strategic management and other best practices throughout the CWSRF community, but to also provide effective oversight of the programs. To this extent, EPA is developing:

### CWSRF Standard Operating Procedures

EPA is creating a series of Standard Operating Procedures (SOPs) which will outline the various components of the annual EPA Regional review of state programs. The first SOP, "Transaction Testing for Erroneous Payments," was released in 2008, and additional SOPs are expected in 2009. SOPs are intended to streamline the review process for regional staff by establishing a clear set of guidelines for reviews. Additionally, SOPs will clearly explain to state programs what is expected of them. Both measures will make the annual review process more efficient, help ensure state programs conform to CWSRF statute, and maximize the use of program resources.

### 2009 CWSRF Conference

The CWSRF's 2009 National Conference, "Strategic Management of the Clean Water State Revolving Fund Programs: The Next 20 Years," is scheduled to be held in Chicago, Illinois from July 14 - 15, 2009. The conference will bring managers and senior staff from throughout the country together to discuss CWSRF program strategic management in an interactive discussion format. The conference will address management of CWSRF environmental and financial performance, and present practices and solutions to enhance state efforts to address the nation's current and future water quality problems. Meeting materials will be made available as a resource for states to use when considering the implementation of new management strategies. Potential topics to be discussed include:

- Major trends affecting the strategic direction of the CWSRF programs.
- Progress and opportunities presented by stimulus funding.
- Opportunities in managing financial resources to meet long-term water quality and public health goals.
- Positioning the CWSRF to play an effective role in integrated water quality planning and management.
- Utilizing data management and communication for improved CWSRF outreach and marketing.
- Funding green infrastructure projects with the CWSRF.
- Issues and opportunities presented by potential CWSRF reauthorization.

Updated information on the Conference, including registration details, can be found at: **http://www.cwsrfconference.net**.

## EXPANDING MARKETING AND OUTREACH

Marketing and outreach are very important for the continued success of the CWSRF programs. For 2009, EPA will assist these efforts by producing the following:

### *SRF's Up* Newsletter

*SRF's Up* is a biannual newsletter presenting up-to-date program news and examples of state innovation. It is designed to highlight new and creative practices, allowing states to learn about what other CWSRF programs are doing. It is also a great way to showcase the programs' achievements in a format accessible to the general public. In 2008, two issues of *SRF's Up* were published, addressing the draft white paper, program marketing, and strategic management and planning. Additional issues are planned for 2009, with information on topics such as the American Recovery and Reinvestment Act of 2009 and the 2009 CWSRF Conference.

### Activity Updates

CWSRF Activity Updates focus on financial or programmatic innovations being implemented in the CWSRF programs, and each includes several specific examples of states that have successfully adopted these new strategies. They are great resources for states that are looking to learn from the successes of other CWSRF programs. Several new Activity Updates are planned for 2009, including one on mapping data in the CWSRF Benefits Reporting system.

### FACT-Lite

The Financing Alternatives Comparison Tool (FACT) allows users to compare the annual and cumulative costs of different financing options. In response to feedback, EPA is improving FACT by adding Fact-Lite, an analysis option that simplifies this tool by reducing the amount of information users must enter to conduct a comparison. A comprehensive user guide is also being developed. The new version of FACT will be more accessible to small communities and will serve as an effective marketing tool by demonstrating the cost savings of pursuing CWSRF financing when compared to funding alternatives. It is scheduled to be released in the spring of 2009.

# CWSRF 2008 PERFORMANCE HIGHLIGHTS

## A Continued Source of Project Financing

In 2008, the CWSRF programs funded over $5.8 billion in projects, raising cumulative assistance to nearly $69 billion over the last 21 years. This number is projected to continue growing in the coming years, as interest earnings and repayments of outstanding loan principal increase, and states with high demand continue to leverage by issuing revenue and general obligation bonds.

## Saving Communities Money

According to a popular municipal borrowing index, the average municipal borrowing rate was 4.6 percent in 2008. The average CWSRF loan received a rate of 2.2 percent. This means that communities that borrowed from the CWSRF in 2008 will save an average of 20 percent over the life of a typical 20-year loan. SRF interest rates continue to provide significant subsidies to communities across the country.

**FIGURE 5 | CWSRF Cumulative Assistance Reached $68.8 billion through 2008**

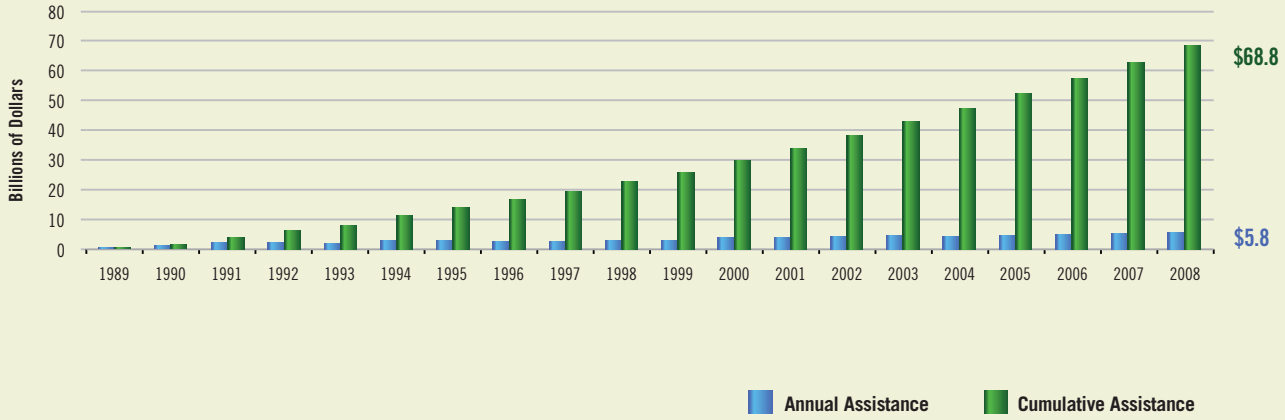
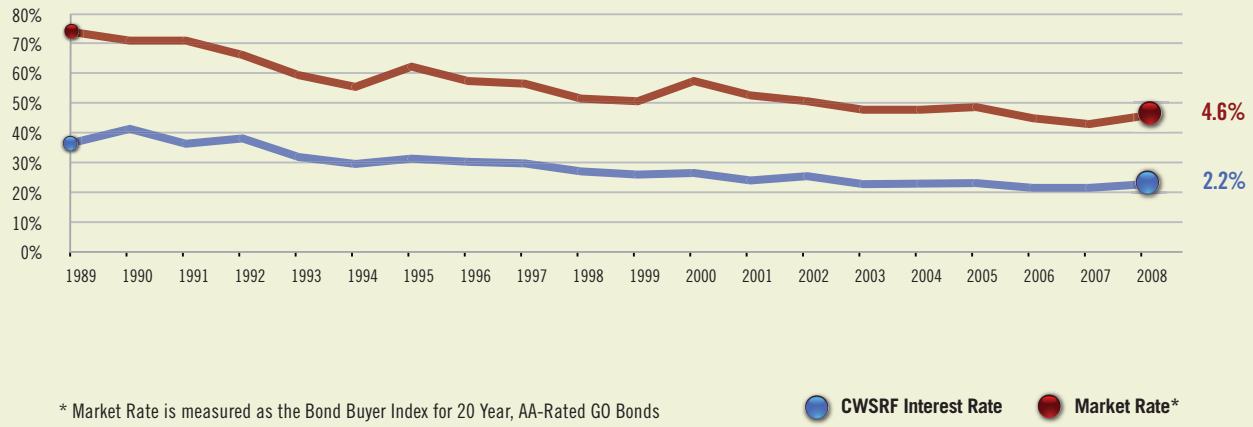



**FIGURE 6 | CWSRF Loans Save Communities 20 Percent**




* Market Rate is measured as the Bond Buyer Index for 20 Year, AA-Rated GO Bonds

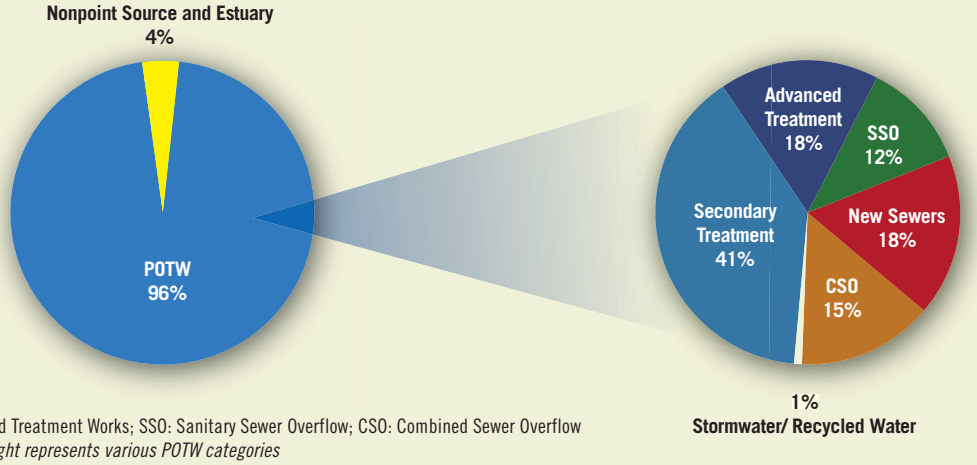
## Funding a Broad Range of Project Types

The CWSRF was designed to allow state programs the flexibility to fund projects based on state water quality priorities. As a result, the CWSRF programs fund a wide range of project types each year. In 2008, this included $2.7 billion for secondary and advanced treatment facilities, $2.9 billion for sewer construction, as well as more than $220 million for nonpoint source projects such as sanitary landfill and brownfield rehabilitation, hydromodification, urban stormwater runoff management, onsite systems, and agricultural best management practices.

## Serving Communities of All Sizes

The CWSRF programs provide funding to environmentally critical projects in small, medium, and large communities. In 2008, 62 percent of all assistance agreements were made with communities of fewer than 3,500 people and nearly $1.2 billion went to communities with populations below 10,000. Large communities also received considerable funding, including nearly $2.5 billion for projects in communities with populations of more than 100,000.

### FIGURE 7 | CWSRFs Provide $68.8 Billion Clean Water Financing through 2008




POTW: Publicly Owned Treatment Works; SSO: Sanitary Sewer Overflow; CSO: Combined Sewer Overflow
*Note: Chart on the right represents various POTW categories*

### FIGURE 8 | Communities Served by CWSRFs in 2008


Dollar Amount of Assistance ($5.8 Billion)

Number of Assistance Agreements (2,033)

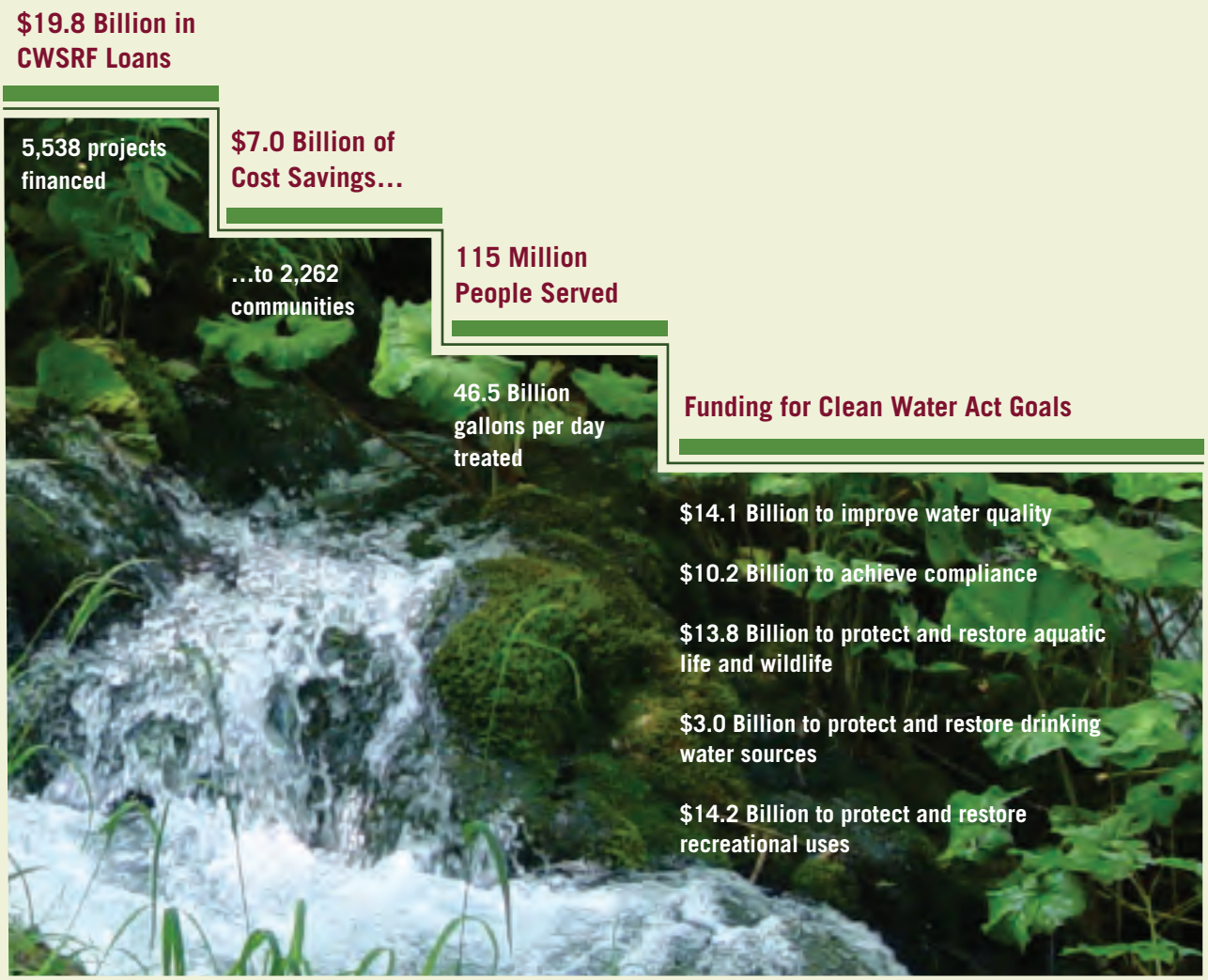
## Improving the Environment

Projected environmental benefits information is available for $19.8 billion in CWSRF funded projects. This information shows that these projects contribute significantly to the protection and restoration of rivers, lakes, and streams throughout the country. For example, over $13 billion went to projects that positively affect aquatic life and wildlife, and nearly $6 billion funded projects that help provide clean water for industry, agriculture, and public drinking water supply.

## Impacting Millions of Americans

The CWSRF Benefits Reporting System demonstrates that CWSRF funded projects have improved water quality for millions of Americans. This includes improved access to water for recreational purposes for over 95 million people, improvements to water that supports fish and shellfish for consumption for 45 million people, and improved access to clean drinking water for more than 33 million people.

**FIGURE 9 | Linking CWSRF Financing to the Protection and Restoration of our Nation's Waters**




Based on initial reporting of recent projects that account for approximately 29% of cumulative CWSRF financing.

# 2008 Financial Performance Overview

**The Clean Water Act requires an annual financial audit of the 51 state-level CWSRF programs. Each state and Puerto Rico conducts these audits according to the generally accepted auditing standards established by the Governmental Accounting Standards Board (GASB). States often define their CWSRF programs as ongoing enterprise funds under the GASB definitions of funds. The standardized financial statements used for CWSRF programs include the following:**

### Statement of Fund Activities

This statement provides an overview of major indicators of fund activity, including the capitalization grant levels, project commitments, and project disbursements. Both annual and cumulative data are given.

### Statement of Revenues, Expenses, and Earnings

This statement describes the overall performance of the CWSRF fund over the reporting period.

### Statement of Cash Flows

This statement provides a detailed accounting of the actual flow of cash into and out of the CWSRF fund.

### Statement of Net Assets

This statement describes a fund's assets and liabilities through the end of the fiscal year. Assets include financial assets and capital assets; liabilities include both current and long-term liabilities. CWSRF fund assets include grant funds that have been drawn from the federal treasury to date, but do not include total grant awards.

Because the 51 constituent CWSRF programs are independent state-level entities, no nationally audited CWSRF program financial reports are available. However, using EPA's National Information Management System, national aggregate financial statements have been developed and are included in the following pages. The statements are best viewed as non-audited, cash flow-based financial reports.

### FINANCIAL STATEMENT HIGHLIGHTS

- Total assets increased by $2.9 billion, a 5.3% increase from 2007.
- CWSRF program equity (net assets) totals $33.9, a 5.8% increase from 2007.
- Total program revenues exceeded expenses by $1.9 billion, with interest earnings from loans and investments totaling almost $1.7 billion.
- Loan principal repayments to the CWSRF were $2.3 billion.
- Leveraged bond proceeds added more than $1.9 billion to program cash flow.

# CWSRF NATIONAL PERFORMANCE SUMMARY *(Millions of Dollars)*

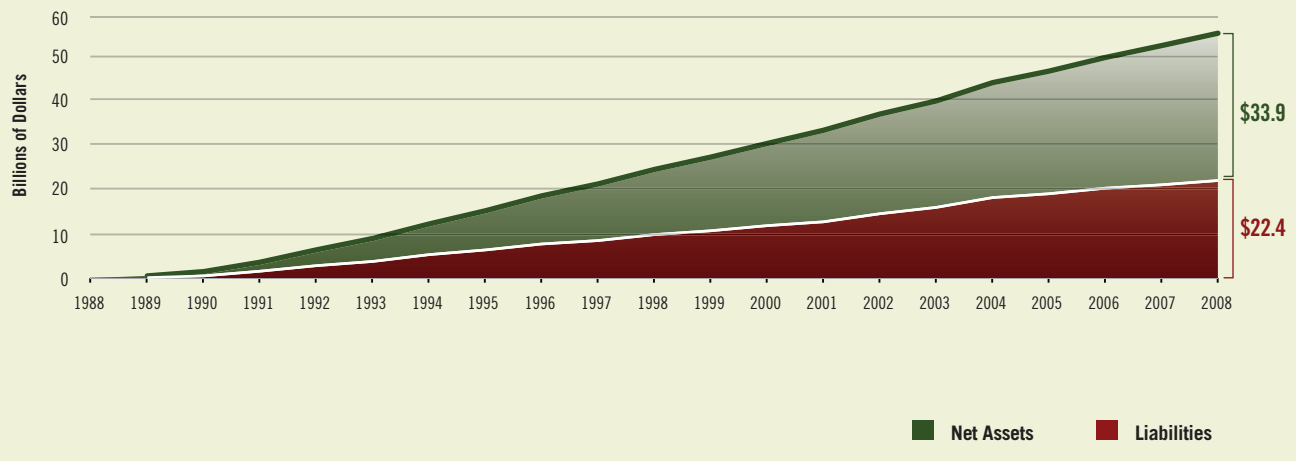
| Fund Activity | 2008 | 2007 |
|---|---|---|
| **Annual Fund Activity** | | |
| Federal Capitalization Grants | 1,164.9 | 776.7 |
| State Matching Funds | 265.5 | 159.7 |
| New Funds Available for Assistance | 5,014.9 | 4,193.8 |
| Project Commitments (Executed Loan Agreements) | 5,835.7 | 5,336.3 |
| Project Disbursements | 5,525.6 | 5,095.4 |
| Cash Draws from Federal Capitalization Grants | 1,176.2 | 1,421.2 |
| **Cumulative Fund Activity** | | |
| Federal Capitalization Grants | 26,132.4 | 24,967.5 |
| State Matching Funds | 5,572.8 | 5,307.3 |
| Funds Available for Assistance | 70,135.8 | 65,120.9 |
| Project Commitments (Executed Loan Agreements) | 68,781.1 | 62,945.4 |
| Project Disbursements | 59,685.4 | 54,159.9 |
| Cash Draws from Federal Capitalization Grants | 24,791.6 | 23,615.4 |

| Revenue, Expenses, and Earnings | 2008 | 2007 |
|---|---|---|
| **Operating Revenues** | | |
| Interest on Investments | 733.1 | 765.3 |
| Interest on Loans | 956.8 | 919.3 |
| *Total Operating Revenues* | 1,690.0 | 1,684.6 |
| **Operating Expenses** | | |
| Bond Interest Expense | 1,010.1 | 980.3 |
| CWSRF Funds Used for Refunding | 135.5 | 117.1 |
| Amortized Bond Issuance Expense | 14.4 | 16.2 |
| Administrative Expenses | 44.0 | 43.0 |
| *Total Expenses* | 1,204.0 | 1,156.6 |
| **Nonoperating Revenues and Expenses** | | |
| Federal Contribution | 1,176.2 | 1,421.2 |
| State Contributions | 206.9 | 119.1 |
| Transfers from (to) DWSRF | (11.4) | (12.7) |
| *Total Nonoperating Revenues (Expenses)* | 1,371.6 | 1,527.6 |
| **Increase (Decrease) in Net Assets** | 1,857.6 | 2,055.6 |
| **Net Assets** | | |
| Beginning of Year | 32,088.2 | 30,032.6 |
| End of Year | 33,945.8 | 32,088.2 |

Note: Statement presents a compilation of reporting from 51 state programs and is not audited. Sum of individual values may not exactly equal the total due to rounding error. 2007 data was revised from the 2007 Annual Report to incorporate updated state information. Source: EPA's CWSRF National Information Management System (June 30, 2008).

| Net Assets | 2008 | 2007 |
|---|---|---|
| **Assets** | | |
| Cash and Cash Equivalents | 9,107.9 | 9,575.2 |
| Debt Service Reserve - Leveraged Bonds | 7,186.5 | 7,095.4 |
| Loans Outstanding | 39,799.9 | 36,573.8 |
| Unamortized Bond Issuance Expenses* | 293.2 | 288.5 |
| *Total Assets* | 56,387.6 | 53,532.8 |
| **Liabilities** | | |
| Match Bonds Outstanding | 572.5 | 582.7 |
| Leveraged Bonds Outstanding | 21,869.3 | 20,861.9 |
| *Total Liabilities* | 22,441.8 | 21,444.6 |
| **Net Assets** | | |
| Federal Contributions | 24,791.6 | 23,615.4 |
| State Contributions | 4,236.3 | 4,029.4 |
| Transfers - Other SRF Funds | (398.9) | (387.5) |
| Other Net Assets | 5,316.7 | 4,830.8 |
| *Total Net Assets* | 33,945.8 | 32,088.2 |
| **Total Liabilities & Net Assets** | **56,387.6** | **53,532.8** |

**FIGURE 10 | Net Worth of the CWSRF is increasing as Net Assets Grow Faster**




Note: Statement presents a compilation of reporting from 51 state programs and is not audited. Sum of individual values may not exactly equal the total due to rounding error. 2007 data was revised from the 2007 Annual Report to incorporate updated state information. Source: EPA's CWSRF National Information Management System (June 30, 2008).

*Unamortized bond issuance costs that have been incurred but have not been fully recognized (amortized). These costs will be recognized (amortized) over time over the remaining life of the bonds outstanding, similar to a pre-paid expense, and consistent with GAAP.

| Cash Flows | 2008 | 2007 |
|---|---|---|
| **Operating Activities** | | |
| Cash Draws from Federal Capitalization Grants | 1,176.2 | 1,421.2 |
| Contributions from States | 206.9 | 119.1 |
| Loan Disbursements Made to Borrowers | (5,525.6) | (5,095.4) |
| Loan Principal Repayments | 2,299.4 | 2,364.2 |
| Interest Received on Loans | 956.8 | 919.3 |
| Administrative Expenses | (44.0) | (43.0) |
| *Total Cash Flows from Operating Activities* | (930.3) | (314.6) |
| **Noncapital Financing Activities** | | |
| Gross Leveraged Bond Proceeds | 1,966.5 | 1,931.7 |
| Bond Issuance Expense | (19.2) | (18.3) |
| State Match Bond Proceeds | 58.6 | 40.6 |
| Cash Received from Transfers with DWSRF | (11.4) | (12.7) |
| Interest Paid on Leveraged and State Match Bonds | (1,010.1) | (980.3) |
| CWSRF Funds Used for Refunding | (135.5) | (117.1) |
| Principal Repayment of Leveraged Bonds | (959.1) | (1,180.4) |
| Principal Repayment of State Match Bonds | (68.8) | (81.9) |
| *Net Cash Provided by Noncapital Financing Activities* | (179.0) | (418.4) |
| **Cash Flows from Capital and Related Financing Activities** | 0.0 | 0.0 |
| **Investing Activities** | | |
| Interest Received on Investments | 733.1 | 765.3 |
| Deposits to Debt Service Reserve for Leveraged Bonds | (91.2) | (348.4) |
| *Net Cash Provided by Investing Activities* | 642.0 | 416.9 |
| **Net Increase (Decrease) in Cash and Cash Equivalents** | (467.3) | (316.1) |
| Beginning Balance - Cash and Cash Equivalents | 9,575.2 | 9,891.3 |
| Ending Balance - Cash and Cash Equivalents | 9,107.9 | 9,575.2 |

Note: Statement presents a compilation of reporting from 51 state programs and is not audited. Sum of individual values may not exactly equal the total due to rounding error. 2007 data was revised from the 2007 Annual Report to incorporate updated state information. Source: EPA's CWSRF National Information Management System (June 30, 2008).

# CWSRF AT A GLANCE

## Funds Available for Projects (Billions of Dollars)

| | 2008 | 1988-2008 |
|---|---|---|
| **Total Funds** | **5.0** | **70.1** |
| Federal Cap Grants | 1.2 | 26.1 |
| State Match | 0.3 | 5.6 |
| Net Leveraged Bonds | 1.8 | 22.4 |
| Net Loan Principal Repaid | 1.3 | 11.7 |
| Net Interest Earnings | 0.5 | 5.7 |
| Net Transfers with DWSRF | (0.01) | (0.4) |
| Less Administration | (0.05) | (1.1) |

Number of Loans in 2008 = 2,030; Total = 22,700
Interest Rate in 2008 = 2.2% (Market = 4.6%)

### As of 2008

Return on Federal Investment = 2.41 Times
SRF Assistance as % of Funds Available = 98%
27 States Leverage; 21 Issue Match Bonds
40 States Fund Nonpoint Source Projects
30 States Use Integrated Priority Setting Systems
48 States Conduct Separate Audits
40 States Fund Separate Grant/Loan Programs

## Assistance Provided to Projects

| | 2008 | 1988-2008 |
|---|---|---|
| **Total, Project Type** | **5.8** | **68.8** |
| Wastewater Treatment | 5.58 | 65.3 |
| Nonpoint Source | 0.22 | 2.9 |
| Not Classified | 0 | 0.6 |
| **Total, Population Served** | **5.8** | **68.8** |
| < 3,500 | 0.58 | 7.3 |
| 3,500 – 9,999 | 0.62 | 8.2 |
| 10,000 – 99,999 | 2.14 | 23.2 |
| 100,000 and Above | 2.50 | 30.1 |
| **Wastewater Treatment** | **5.6** | **65.3** |
| Secondary Treatment | 1.75 | 26.3 |
| Advanced Treatment | 0.93 | 11.8 |
| SSO Correction | 0.98 | 7.8 |
| New Sewers | 0.93 | 12.0 |
| CSO Sewers | 0.86 | 6.7 |
| Storm Sewers | 0.05 | 0.4 |
| Recycled Water | 0.08 | 0.3 |

**For more information on the Clean Water State Revolving Fund Please Contact:**


Clean Water State Revolving Fund Branch
U.S. Environmental Protection Agency
1201 Constitution Avenue, NW *(Mailcode 4204M)*
Washington, DC 20004

(202) 564-0752 *Tel*
(202) 501-2403 *Fax*


http://www.epa.gov/owm/cwfinance/cwsrf


OFFICE OF WATER | MARCH 2009 | EPA-832-09-001